CAREER AND TECHNOLOGY STUDIES

PROGRAM PHILOSOPHY AND RATIONALE

VISION

To engage students in learning opportunities through which they discover their interests in practical and purposeful ways.

INTRODUCTION

Canadian society experiences continuous social, cultural and economic change, and today's students must be confident in their ability to respond to change and successfully meet the challenges they face. Whether students enter the work force or continue their education after senior high school, they will be challenged by increased independence and responsibility as they pursue choices and opportunities in their life paths.

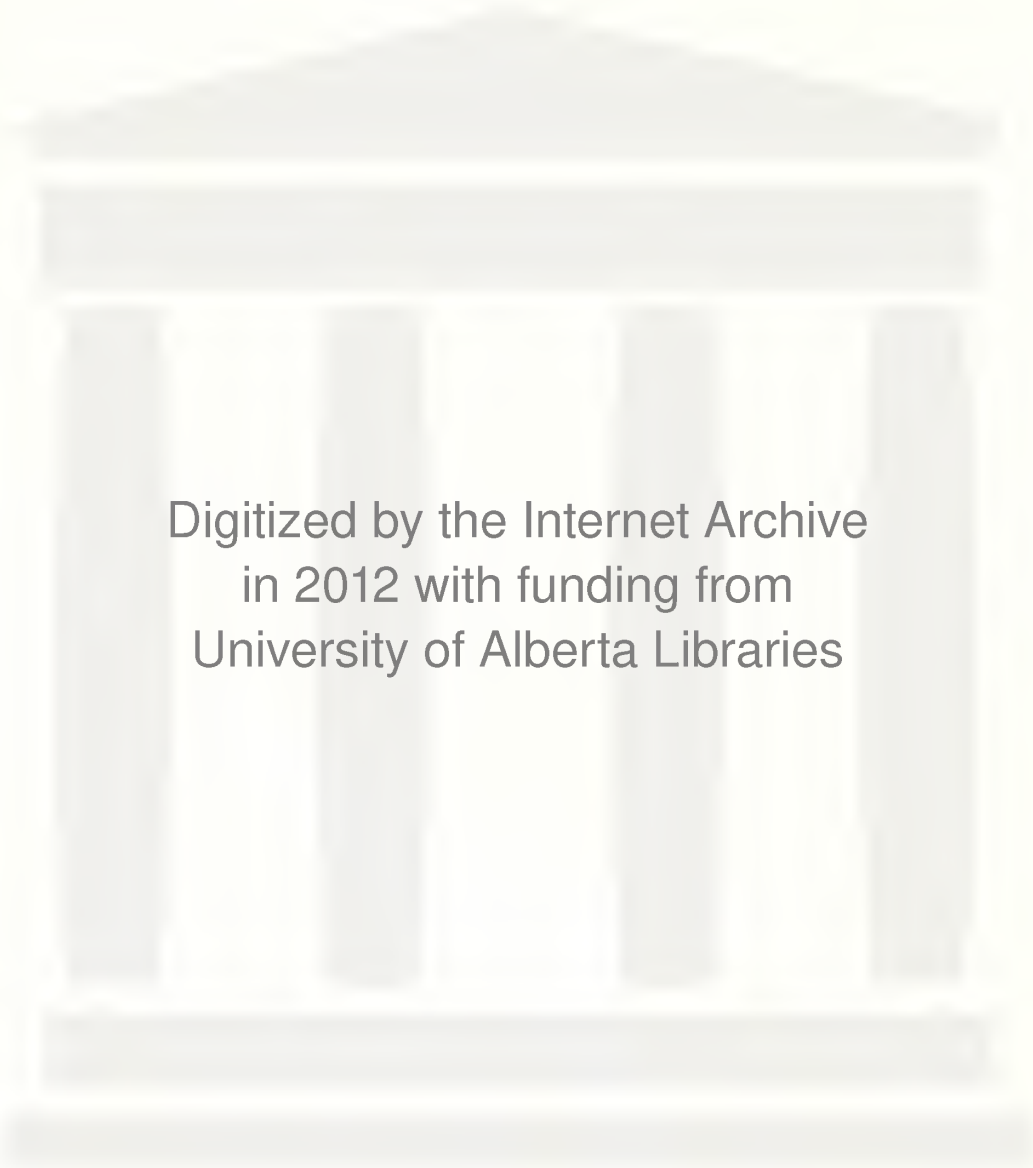
Current trends indicate that the majority of new jobs today and in the future will require some form of post-secondary education and that the completion of senior high school will no longer be [redacted]ta faces a range of emerging [redacted]ding the changing nature of work [redacted]ns; the requirement of greater skills [redacted]ge in many occupations; the [redacted]tion of new technologies; changing [redacted] of education and training; the [redacted]zation of the marketplace; labour shortages; [redacted] need for highly skilled, educated and [redacted]ive people.

The Career and Technology Studies (CTS) program has been revised and refocused in cooperation with teachers, business and industry representatives, and post-secondary educators to address the emerging trends, challenges and opportunities of today and tomorrow. The result is:

- a focused program of studies based on credible occupational areas
- opportunities for all students to explore their abilities, interests and passions and to develop knowledge, skills and attitudes through exploratory courses or a pathways model
- printed and digital resources that support learning experiences in career fields
- access to CTS programming through classroom, online, off-campus and other combined approaches to instruction.

PHILOSOPHY

The CTS program is designed to develop skills that senior high school students can apply in their daily lives when preparing for entry into the workplace or for further learning opportunities. Through the CTS program, students are provided with opportunities to personalize their learning, identify and explore their interests, manage transitions and build partnerships while developing basic competencies, that is, the attitudes and behaviours that people need to participate and progress in today's dynamic world of work.



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Current trends indicate that the majority of new jobs today and in the future will require some form of post-secondary education and that the completion of senior high school will no longer be sufficient. Alberta faces a range of emerging challenges, including the changing nature of work and career paths; the requirement of greater skills and knowledge in many occupations; the introduction of new technologies; changing patterns of education and training; the globalization of the marketplace; labour shortages; and the need for highly skilled, educated and innovative people.

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Today's world of work demands that individuals are able to navigate and build their own career paths while adapting to continual change. This expectation requires a shift in the language used to define "career" as well as a shift in the delivery of career development. Careers are not defined as jobs and occupations, but rather as whole packages of expressed roles, knowledge, choices, passions and experiences. Careers are created by individuals who act upon passions, interests, abilities and other internal factors and combine them with external options and circumstances. Each person's career path is unique, even though individuals may share common credentials, occupations, work roles, or jobs and experiences.

Ultimately, it is the student who will make his or her own links between school, career development and post-secondary options. Career development requires students to be active in their learning and to develop enthusiasm for lifelong learning that carries them beyond learning in school.

Career development also requires acknowledgement that today's world is a technological world. Technology affects the environment, one's standard of living and one's quality of life. People use technology in the workplace, at home, at school and in sporting and leisure activities. Technology is used to extend possibilities, allowing individuals to intervene in the world through the development of products, systems and environments. Technology is continually changing. It is influenced by and, in turn, influences the cultural, ethical, environmental, political and economic factors of the day, both local and global.

Students in CTS can develop competence and confidence in understanding and using existing technologies and in creating solutions to technological problems. Taking CTS courses contributes to the intellectual and practical development of students, as individuals and as informed members of a technological society.

The CTS program strives to address career development in a way that emphasizes personalized learning, relevance, transitions and partnerships. It does so by:

- providing opportunities for all students to explore their abilities, interests and passions and to develop knowledge, skills and attitudes so they can be fulfilled, productive citizens
- providing opportunities for all students to develop the foundations to manage transitions within their learning environment and when moving into further education, training and/or the workplace
- influencing the growth of a career development culture in schools and communities
- facilitating the integration and coordination of career development across Kindergarten to Grade 12, advanced education, workplaces and the community.

Students' interests might lie in working with their hands, working with other people, working in an environment of constantly changing ideas, or working in a career that follows carefully established patterns. All of these areas include a variety of occupations that require more or less education.[1]

RATIONALE

CTS courses enable students to make reasoned and effective career decisions and target efforts to meet their goals. Students will have opportunities to expand their knowledge about careers, occupations and job opportunities, as well as the education and/or training requirements involved. Competencies achieved by mastering CTS course outcomes will allow students to make relevant connections with work and/or post-secondary training.

CTS also enables students to develop the confidence they need as they move into adult roles by allowing them to assume increased responsibility for their learning; cultivate their individual talents, interests and abilities; and define and act on their goals. The CTS pathways model includes the following benefits for students, educators and employers.

1. "From the Mouths of Middle-Schoolers: Important Changes for High School and College." *Phi Delta Kappan*, Vol. 89, No. 03 (November 2007): 189–193. William J. Bushaw. Reprinted with permission of PDK International.

Benefits for Students

Through the pathways model, students experience:

- relevant and engaged learning
- freedom in exploring multiple pathways
- personally meaningful pathways leading to specialized skills
- engagement in their interests or passions
- opportunities to achieve post-secondary credentials while still in senior high school
- easier transitions from senior high school to post-secondary education or the work force.

Benefits for Educators

Through the pathways model, educators experience:

- more focused organization of CTS courses
- a focused and engaged learner
- greater opportunity for community support.

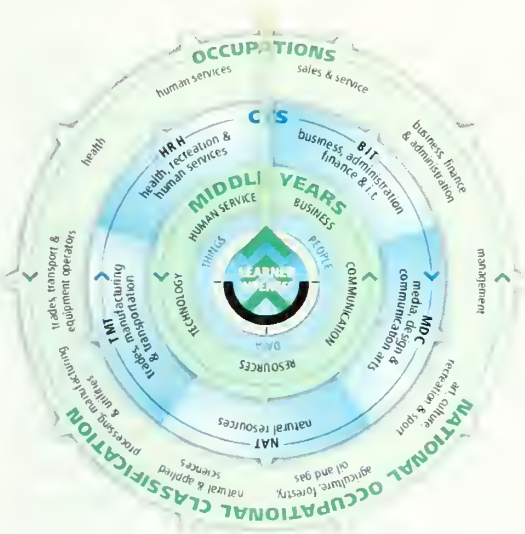
Benefits for Employers

Through the pathways model, employers experience:

- employees with specialized skills or post-secondary or industry credentials
- motivated and engaged employees.

PROGRAM ORGANIZATION

OVERVIEW



The CTS Compass above can assist students as they explore and discover their interests and passions.

As students move into the Middle Years, they begin to identify with one or more interest areas: business, communication, resources, technology and/or human service. As students enter senior high school and the CTS program, they begin to identify the occupational cluster or clusters that suit their interests and abilities. As students become more focused, they examine options for occupations based on the National Occupational Classification. With a career goal in mind, students can develop a pathway that leads them directly to an occupation or to post-secondary education.

The organization of the CTS program into clusters provides students, teachers and administrators with opportunities to create exploratory programs, in which students can sample courses of interest, or to use or create focused pathways that lead to specialized skills, external credentials or further education. Career guidance professionals may use this organizational structure to assist students in assessing their educational goals, interests, abilities and skills and to facilitate good matches to the many pathway options possible in the CTS clusters.

CTS COURSES

CTS courses are competency-based instructional units defined by learning outcomes that identify what a student is expected to know and be able to do. Courses include outcomes with practical applications, and each course represents approximately 25 hours of access to instruction. CTS courses are weighted at 1 credit each and are divided into three levels of achievement: introductory, intermediate and advanced. Some courses require one or more prerequisites, which are essential for maintaining safety standards, appropriate instructional sequence and articulation with post-secondary programs. CTS courses can be selected by students in an exploratory fashion, or they can be taken as part of an intentional pathway.

For each course, the program of studies lists a general description, the general and specific outcomes, prerequisites and course parameters (e.g., recommendations regarding instructional qualifications, facilities and equipment). The general outcomes are presented in boldface, and the specific outcomes follow immediately in lightface.

Levels of Achievement

Courses are organized into three levels of achievement: **introductory**, **intermediate** and **advanced**. Levels of achievement are not indicators of grade levels. As students progress through the levels, they will be expected to meet higher standards and to demonstrate an increased degree of competence in both the general and specific outcomes.

Introductory level courses help students build daily living skills and form the basis for further learning. Introductory courses prepare students for further experiences in the cluster, pathway or occupational area.

Intermediate level courses build on the competencies developed at the introductory level. They provide a broader perspective, helping students recognize the wide range of related career opportunities available within the cluster.

Advanced level courses refine expertise and help prepare students for entry into the workplace or a related post-secondary program defined within the cluster.

CTS CLUSTERS

A cluster is a group of CTS courses that represents occupations and broad industry commonalities. Clusters in CTS are aligned with the National Occupational Classification (NOC) and function as an organizing tool for the CTS program. (For more information on the NOC, visit the Human Resources and Skills Development Canada Web site at http://www5.hrsdc.gc.ca/NOC-CNP/app/AboutNOC.aspx?lc=E.)

The CTS program includes five clusters: Business, Administration, Finance & Information Technology (BIT); Health, Recreation & Human Services (HRH); Media, Design & Communication Arts (MDC); Natural Resources (NAT); and Trades, Manufacturing & Transportation (TMT).

Clusters connect learning outcomes specific to the knowledge, skills and attitudes required for related occupational areas. Clusters:

- help students choose curriculum and occupational fields for which they have interest and aptitude
- provide a context for selecting courses specific to a pathway
- help connect students with exploratory courses of study, allowing students to gain general, transferable skills
- help students develop specialized skills and knowledge through pathways
- focus teaching and learning by relating similar knowledge, linking shared skills, guiding career exploration, allowing students to make informed career choices, associating common interests and linking education with relevant real-world experiential activities.

The Five Clusters

Business, Administration, Finance & Information Technology (BIT)
The focus of the BIT cluster is for students to develop and apply important knowledge, skills and attitudes so they can implement efficient systems and strategies of management and marketing and use electronic technologies to collect, structure, manipulate, retrieve and communicate information within individual, family, workplace, community and global contexts.

Health, Recreation & Human Services (HRH)
The focus of the HRH cluster is for students to develop and apply important knowledge, skills and attitudes so they can provide care and services for individuals and groups in a variety of industries, such as health care, recreation, cosmetology, the food industry and the legal system.

Media, Design & Communication Arts (MDC)
The focus of the MDC cluster is for students to develop and apply important knowledge, skills and attitudes so they can provide well designed and aesthetically effective communication solutions.

Natural Resources (NAT)
The focus of the NAT cluster is for students to develop and apply the knowledge, skills and attitudes to work individually and collectively, as private citizens and as members of the work force, toward the conservation and responsible use of energy and natural resources.

Trades, Manufacturing & Transportation (TMT)
The focus of the TMT cluster is for students to develop and apply important knowledge, skills and attitudes relative to the manufacture and assembly of products from individual components and the processing of raw materials into products.

CTS PATHWAYS

Many schools in North America and around the world are now providing students with opportunities to explore their career path through a variety of courses that are organized around common occupational areas. These pathways allow students to follow their natural skills, aptitudes and interests in an organized and progressive way as they work toward goals that may include university, college, apprenticeship training or moving directly into the work force.

Pathways are flexible and they permit students to:

- explore an occupation or an interest area
- gain an occupational or a specialized skill set required in the workplace
- apply relevant learning from academic courses to real-life situations
- focus their senior high school course plans into a career path.

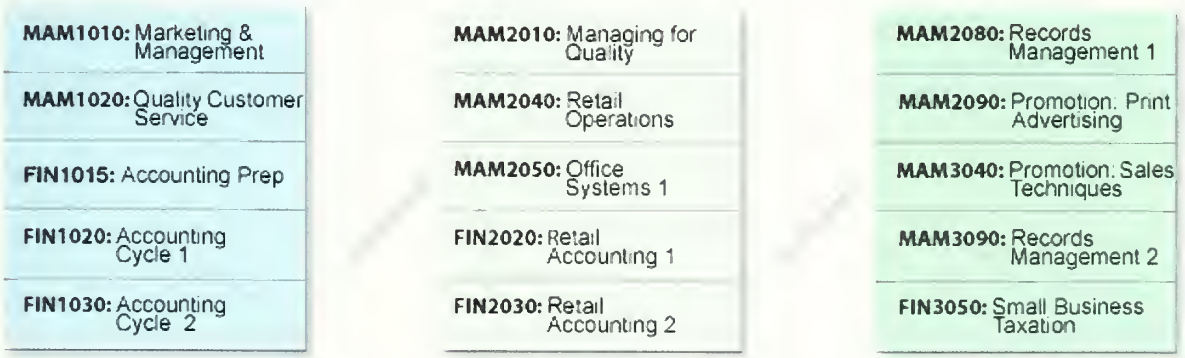
The pathways model of CTS facilitates making connections between CTS courses and other subjects. Within each CTS cluster, the potential for several pathways exists. These pathways will address the specific skills and knowledge necessary to pursue a full range of career opportunities, including technical and professional career specialties. All pathways, with the exception of credentialed pathways (see the text in the right-hand column), can be built and modified by students or teachers.

Pathways should be designed to prepare students to transition successfully from senior high school to post-secondary education or to employment in an occupational area. Links to post-secondary educational institutions, employers, industry groups and other stakeholders can be included within a pathway.

There are two possible kinds of pathways in the CTS program:

1. **Specialized skill pathways** provide students with the knowledge, skills and attitudes for employment or further education. These pathways can be customized to meet student, school or community program needs. Courses within such a pathway will prepare students for specific community or job-site skills.
2. **Credentialed pathways** provide students with post-secondary and/or business and industry credentials or articulation. For students to obtain the desired credential or articulation, all specified course outcomes within the pathway must be met.

SAMPLE PATHWAY (BIT): BUSINESS BASICS



Note: A variety of sample pathways are provided in the *Guide to Career and Technology Studies*.

MEETING THE DIVERSE NEEDS OF ALBERTA'S STUDENTS

Alberta schools include students from a rich variety of backgrounds. These students have a wide range of abilities and needs. Like all school programs, the CTS program has been developed with this diversity in mind. Teachers and instructors should be aware of the individual needs of their students and adapt their instruction and programming accordingly.

First Nations, Métis and Inuit (FNMI) Students

FNMI students in northern and western Canada come from diverse geographic areas with varied cultural and linguistic backgrounds. Teachers and instructors need to understand the diversity of these students' cultures and experiences. They also need to understand that there are values and cultural traditions shared amongst many Aboriginal Canadians, including the importance of family and the role of Elders in guiding and supporting young people.

FNMI students often have a holistic view of learning—they look for connections through experiential learning. Such connections can be made within the real-world, experiential CTS program. Traditionally, in FNMI cultures, little emphasis was placed upon the written word. Still today, oral communication and practical applications and experiences are important to student learning and understanding. A variety of teaching and assessment strategies can help build upon the diverse knowledge, cultures, communication styles, skills, attitudes, experiences and learning styles of FNMI students.

English as a Second Language or French as a Second Language Students

Immigrants to Alberta come from many different cultural and linguistic backgrounds. Many of these new arrivals become students in Alberta schools, yet their knowledge of English or French may be minimal. Some students who have lived in Canada their entire lives may also be learning to speak English or French as a second (or third) language. The variety of teaching and assessment strategies that can be used in the CTS program may help build upon the diverse knowledge, cultures, communication styles, skills, attitudes, experiences and learning styles of these students.

Students Who Have an Individualized Program Plan (IPP)

Students who have been identified as having special education needs will have an Individualized Program Plan (IPP), which should be used to guide teachers' planning and instruction. The needs of these students vary greatly from one individual to the next and may range from physical adaptations to the environment or equipment, to arranging for special testing accommodations.

CLUSTER COURSES

Business, Administration, Finance & Information Technology (BIT) Courses		
Introductory Level	**Intermediate Level**	**Advanced Level**
Computing Science		
CSE1010: Computer Science 1	CSE2010: Computer Science 2	CSE3010: Computer Science 3
CSE1110: Structured Programming 1	CSE2110: Procedural Programming 1	CSE3020: Computer Science 4
CSE1120: Structured Programming 2	CSE2120: Data Structures 1	CSE3110: Iterative Algorithm 1
CSE1210: Client-side Scripting 1	CSE2130: Files & File Structures 1	CSE3120: Object-oriented Programming 1
CSE1220: Client-side Scripting 2	CSE2140: Second Language Programming 1	CSE3130: Object-oriented Programming 2
CSE1240: Robotics Programming 1	CSE2210: Client-side Scripting 3	CSE3140: Second Language Programming 2
CSE1910: CSE Project A	CSE2240: Robotics Programming 2	CSE3210: Server-side Scripting 1
	CSE2910: CSE Project B	CSE3240: Robotics Programming 3
	CSE2920: CSE Project C	CSE3310: Recursive Algorithms 1
		CSE3320: Dynamic Data Structures 1
		CSE3330: Dynamic Data Structures 2
		CSE3340: Dynamic Data Structures 3
		CSE3910: CSE Project D
		CSE3920: CSE Project E
Enterprise and Innovation		
ENT1010: Challenge & Opportunity	ENT2010: Analyzing Ventures	ENT3010: Managing the Venture
ENT1020: Elements of a Venture Plan	ENT2020: Financing Ventures	ENT3020: Expanding the Venture
ENT1910: ENT Project A	ENT2030: Marketing the Venture	ENT3910: ENT Project D
	ENT2040: Create the Venture	ENT3920: ENT Project E
	ENT2910: ENT Project B	
	ENT2920: ENT Project C	
Financial Management		
FIN1010: Personal Financial Information	FIN2020: Retail Accounting 1	FIN3010: Advanced Accounting
FIN1015: Accounting Prep	FIN2030: Retail Accounting 2	FIN3020: Management Accounting
FIN1020: Accounting Cycle 1	FIN2040: Accounting Software	FIN3030: Capital Accounting
FIN1030: Accounting Cycle 2	FIN2060: Personal Taxation	FIN3040: Financial Statements
FIN1910: FIN Project A	FIN2070: Payroll Accounting	FIN3050: Small Business Taxation
	FIN2910: FIN Project B	FIN3060: Financial Analysis
	FIN2920: FIN Project C	FIN3070: Financial Planning
		FIN3080: Personal Investment Planning 1
		FIN3090: Personal Investment Planning 2
		FIN3910: FIN Project D
		FIN3920: FIN Project E
Information Processing		
INF1030: Word Processing 1	INF2020: Keyboarding	INF3010: Hardware & Software Analysis
INF1050: Database 1	INF2050: Word Processing 2	INF3060: Word Processing 3
INF1060: Spreadsheet 1	INF2070: Database 2	INF3080: Project Management Tools
INF1070: Digital Presentation	INF2080: Spreadsheet 2	INF3095: Productivity Software Integration
INF1910: INF Project A	INF2090: Correspondence	INF3910: INF Project D
	INF2100: Reports	INF3920: INF Project E
	INF2910: INF Project B	
	INF2920: INF Project C	

Management and Marketing		
MAM1010: Marketing & Management	MAM2010: Managing for Quality	MAM3010: The Business Organization
MAM1020: Quality Customer Service	MAM2030: Visual Merchandising	MAM3020: Business in the Canadian Economy
MAM1030: Communication Strategies 1	MAM2040: Retail Operations	MAM3030: Business in the Global Marketplace
MAM1040: E-commerce 1	MAM2050: Office Systems 1	MAM3040: Promotion: Sales Techniques
MAM1050: Agriculture Consumer Products & Services	MAM2060: Communication Strategies 2	MAM3050: Distributing Goods & Services
MAM1910: MAM Project A	MAM2080: Records Management 1	MAM3060: Setting Up a Retail Store
	MAM2090: Promotion: Print Advertising	MAM3070: Office Systems 2
	MAM2110: E-commerce 2	MAM3080: Communication Strategies 3
	MAM2130: Energy & Resources Supply & Distribution	MAM3090: Records Management 2
	MAM2910: MAM Project B	MAM3100: Promotion: Broadcast Advertising
	MAM2920: MAM Project C	MAM3120: E-commerce 3
		MAM3130: Agriculture Marketing
		MAM3140: Energy & Resources Market Basics & Trends
		MAM3150: The Forest Marketplace
		MAM3910: MAM Project D
		MAM3920: MAM Project E

Networking		
NET1010: Digital Technology 1	NET2010: Digital Technology 2	NET3010: Digital Technology 3
NET1910: NET Project A	NET2020: Workstation Technology & Operations	NET3020: Digital Applications
	NET2030: Network Structures	NET3030: Microprocessors
	NET2040: Network Media & Devices	NET3040: Microprocessor Interface
	NET2050: Open System Interconnection	NET3050: Network Operating Systems
	NET2060: Network Protocols	NET3060: Wide Area Networks
	NET2070: Local Area Networks	NET3070: Routing Fundamentals
	NET2080: Laptops & Peripherals	NET3080: Internet Processes
	NET2110: Telecommunications 1	NET3090: Network Management
	NET2910: NET Project B	NET3100: Network Media & Devices, Security
	NET2920: NET Project C	NET3110: Telecommunications 2
		NET3910: NET Project D
		NET3920: NET Project E

Trades, Manufacturing & Transportation (TMT) Courses

Introductory Level	Intermediate Level	Advanced Level
Construction		
CON1010: Construction Tools & Materials	CON2010: Site Preparation	CON3010: Concrete Work (Structures & Finishes)
CON1070: Building Construction	CON2020: Concrete Forming	CON3020: Masonry Work (Structures & Finishes)
CON1120: Product Management	CON2030: Alternative Foundations	CON3030: Wall & Ceiling Finishing
CON1130: Solid Stock Construction	CON2035: Floor Framing Systems	CON3040: Stair Construction
CON1140: Turning Operations	CON2045: Wall Framing Systems	CON3050: Roof Structures 2 (Framing & Covering)
CON1160: Manufactured Materials	CON2050: Roof Structures 1 (Framing & Finishing)	CON3060: Doors & Trim
CON1180: Mould Making & Casting	CON2060: Exterior Finishing (Door, Window & Siding)	CON3070: Floorcovering
CON1910: CON Project A	CON2070: Electrical Systems	CON3080: Energy-efficient Housing
	CON2080: Plumbing Systems	CON3090: Renovations/Restorations
	CON2090: Climate Control Systems	CON3105: Commercial Structures
	CON2100: Agri-structures	CON3110: Site Management
	CON2120: Multiple Materials	CON3120: Tool Maintenance
	CON2130: Furniture Making 1 (Box Construction)	CON3130: Furniture Making 3 (Leg & Rail)
	CON2140: Furniture Making 2 (Frame & Panel)	CON3140: Furniture Making 4 (Surface Enhancement)
	CON2150: Finishing & Refinishing	CON3150: Furniture Repair
	CON2160: Cabinetmaking 1 (Web & Face Frame)	CON3160: Cabinetmaking 3 (Cabinets/ Countertops)
	CON2170: Cabinetmaking 2 (Door & Drawer)	CON3170: Cabinetmaking 4 (Layout & Installation)
	CON2180: Wood Forming	CON3190: Production Planning
	CON2190: Manufacturing Systems	CON3200: Production Management
	CON2200: Product Development	CON3210: Framing Systems 2 (Floor, Wall & Ceiling)
	CON2910: CON Project B	CON3910: CON Project D
	CON2920: CON Project C	CON3920: CON Project E
		CRA3400: Introduction to Work Site Safety
		CRA3405: Basic Hand, Power Tools & Safety
		CRA3410: Construction Materials & Processes
		CRA3415: Site Preparation & Floor Systems
		CRA3420: Foundations & Concrete Structures
		CRA3425: Blueprint Drawings & Sketching
		CRA3430: Construction Machines, Tools & Equipment
		CRA3435: Blueprint Interpretation
		CRA3440: CRA Practicum Course A
		CRA3445: CRA Practicum Course B
		CRA3450: CRA Practicum Course C
		CRA3455: CRA Practicum Course D

Electro-Technologies		
ELT1010: Electro-assembly 1	ELT2010: Electro-assembly 2	ELT3010: Electro-assembly 3
ELT1030: Conversion & Distribution	ELT2020: Electrical Servicing	ELT3020: Electronic Servicing
ELT1050: Electronic Power Supply 1	ELT2030: Branch Circuit Wiring	ELT3030: Power Systems & Services
ELT1080: Control Systems 1	ELT2050: Electronic Power Supply 2	ELT3040: Generation/Transformation
ELT1090: Analog Communication 1	ELT2080: Control Systems 2	ELT3110: Amplifiers
ELT1110: Security Systems 1	ELT2090: Analog Communication 2	ELT3140: Motors
ELT1130: Robotics 1	ELT2110: Security Systems 2	ELT3150: Robotics 3
ELT1140: Robotics Applications 1	ELT2120: Electro-optics	ELT3160: Control Applications
ELT1910: ELT Project A	ELT2130: Magnetic Control Devices	ELT3170: Robotics Microprocessors
	ELT2140: Robotics 2	ELT3180: Robotics Vision Systems
	ELT2150: Electronic Controls	ELT3190: Robotics Kinematics & Behaviour
	ELT2160: Robotics Sensor 1	ELT3200: Robotics Artificial Intelligence
	ELT2170: Robotics Sensor 2	ELT3210: Expert Systems
	ELT2180: Process Control	ELT3910: ELT Project D
	ELT2910: ELT Project B	ELT3920: ELT Project E
	ELT2920: ELT Project C	

Fabrication		
FAB1010: Fabrication Tools & Materials	FAB2010: Structural Engineering	FAB3010: Materials Testing
FAB1040: Oxyacetylene Welding	FAB2020: Print Reading	FAB3020: Metallurgy Fundamentals
FAB1048: Semi-automated/ Automated Welding	FAB2030: Oxyfuel Welding	FAB3030: Gas Tungsten Arc Welding
FAB1050: Basic Electric Welding	FAB2040: Thermal Cutting	FAB3040: Specialized Welding
FAB1090: Sheet Fabrication 1 (Hand Processes)	FAB2048: Flux Core Arc Welding 1	FAB3048: Flux Core Arc Welding 2
FAB1100: Fabrication Principles	FAB2050: Arc Welding 1	FAB3050: Arc Welding 3
FAB1110: Bar & Tubular Fabrication	FAB2060: Arc Welding 2	FAB3060: Arc Welding 4
FAB1120: Foundry 1 (One-piece Pattern)	FAB2070: Gas Metal Arc Welding 1	FAB3070: Pipe & Tubular Welding
FAB1130: Principles of Machining	FAB2090: Sheet Fabrication 2 (Machine Processes)	FAB3080: Automated Welding
FAB1160: Production Systems	FAB2100: Sheet Fabrication 3 (Parallel Line)	FAB3090: Sheet Fabrication 4 (Radial Line)
FAB1910: FAB Project A	FAB2110: Forging Fundamentals	FAB3110: Sheet Fabrication 5 (Duct Components)
	FAB2120: Foundry 2 (Split Pattern)	FAB3120: Foundry 3 (Core Moulding)
	FAB2130: Precision Turning 1	FAB3130: Precision Turning 2
	FAB2140: Precision Milling 1	FAB3140: Precision Milling 2
	FAB2150: CNC Turning (Computer Numerical Control)	FAB3150: CNC Milling (Computer Numerical Control)
	FAB2160: Custom Fabrication	FAB3160: Prefabrication Principles
	FAB2170: Pipe Fitting	FAB3170: Gas Metal Arc Welding 2
	FAB2910: FAB Project B	FAB3910: FAB Project D
	FAB2920: FAB Project C	FAB3920: FAB Project E
		WDA3400: Fabrication Orientation & Safety
		WDA3405: Fabrication Tools & Weld Faults
		WDA3410: Oxyfuel Welding
		WDA3415: Gas Metal Arc Welding
		WDA3420: Flux Cored Arc Welding & Submerged Arc Welding
		WDA3425: Materials Handling
		WDA3430: Shielded Metal Arc Welding (Part 1)
		WDA3435: Shielded Metal Arc Welding (Part 2)
		WDA3440: Shop/Lab Practices for GMAW, FCAW & SAW
		WDA3445: OAW Cutting Practical
		WDA3450: GMAW & FCAW Practical
		WDA3455: SMAW Practical
		WDA3460: WDA Practicum Course A
Logistics		
LOG1010: Logistics	LOG2010: Warehouse & Distribute 2	LOG3010: Warehouse & Distribute 3
LOG1020: Warehouse & Distribute 1	LOG2020: Traffic & Transport 2	LOG3020: Traffic & Transport 3
LOG1030: Traffic & Transport 1	LOG2030: Purchasing 2	LOG3030: Purchasing 3
LOG1040: Purchasing 1	LOG2040: Inventory Management 1	LOG3040: Inventory Management 2
LOG1910: LOG Project A	LOG2910: LOG Project B	LOG3910: LOG Project D
	LOG2920: LOG Project C	LOG3920: LOG Project E

Mechanics		
MEC1010: Modes & Mechanisms	MEC2010: Vehicle Detailing	MEC3010: Buying & Selling Vehicles
MEC1015: Mechanics Tools & Materials	MEC2020: Vehicle Maintenance	MEC3020: Vehicle Value Appraisal
MEC1020: Vehicle Service & Care	MEC2030: Lubrication & Cooling	MEC3030: Engine Diagnosis
MEC1040: Engine Fundamentals	MEC2040: Fuel & Exhaust Systems	MEC3040: Engine Tune-up
MEC1090: Electrical Fundamentals	MEC2050: Alternative Fuel Engines	MEC3050: Engine Replacement
MEC1110: Pneumatics & Hydraulics	MEC2060: Ignition Systems	MEC3060: Engine Reconditioning 1
MEC1130: Mechanical Systems	MEC2070: Emission Controls	MEC3070: Engine Reconditioning 2
MEC1150: Ride & Control Systems	MEC2090: Electrical Components	MEC3080: Alternative Energy Systems
MEC1160: Structures & Materials	MEC2100: Power Assist Accessories	MEC3090: Computer Systems
MEC1165: Mechanics Welding Fundamentals	MEC2110: Braking Systems	MEC3100: Safety Systems
MEC1170: Metal Forming & Finishing	MEC2120: Hydraulic Accessories	MEC3110: Climate Control
MEC1190: Surface Preparation 1	MEC2130: Drive Line	MEC3120: Power Assisting
MEC1910: MEC Project A	MEC2140: Transmissions/ Transaxles	MEC3130: Automatic Transmissions
	MEC2150: Suspension Systems	MEC3140: Drive Train Repair
	MEC2160: Steering Systems	MEC3150: Wheel Alignment
	MEC2170: Metal Repair & Finishing	MEC3160: Body Repair Estimation
	MEC2180: Trim Replacement	MEC3170: Damage Analysis
	MEC2190: Surface Preparation 2	MEC3180: Damage Repair 1
	MEC2200: Refinishing 1	MEC3190: Damage Repair 2
	MEC2210: Touch-up & Finishing	MEC3200: Refinishing 2
	MEC2220: Interior Repairs	MEC3210: Plastic & Fibreglass
	MEC2910: MEC Project B	MEC3220: Glass Replacement
	MEC2920: MEC Project C	MEC3230: Refinishing 3
		MEC3910: MEC Project D
		MEC3920: MEC Project E
		ASA3400: Basic Tools & Materials
		ASA3405: Electrical Fundamentals
		ASA3410: Electrical Circuits & Diagnosis
		ASA3415: Frames, Suspension & Steering Linkages
		ASA3420: Manual & Power Steering Systems
		ASA3425: Steering Angles, Steering Columns & Restraint Systems
		ASA3430: Wheel Alignment Procedures
		ASA3435: Braking Systems I
		ASA3440: Braking Systems II
		ASA3445: Braking Systems III
		ASA3450: Drivelines & Introductory Welding
		ASA3455: ASA Practicum Course A
		ASA3460: ASA Practicum Course B
		ASA3465: ASA Practicum Course C
		ASA3470: ASA Practicum Course D